

1. A method for integrating an encryption/decryption system and an email platform in order to encrypt/decrypt email comprising the steps of:

converting a recipient's addresses from an email format to an

5 Internet format;

obtaining a recipients public key from encryption software key server;

using said recipient's encryption software public keys to encrypt an email;

10 using said recipient's encryption software public keys to encrypt an attachment; and

converting said recipient's address from said internet format to said email format.

15 2. The method for integrating Public-key encryption software and Email software in order to encrypt/decrypt email of claim 1 further comprising the steps of:

providing a means for users to read encryption software encrypted email,

20 providing a means for users to read encryption software encrypted email attachments,

requesting users to type password of encryption software private key,

decrypting mail content, and
decrypting attachment content.

3. The method for integrating Public-key encryption software and Email software
5 in order to encrypt/decrypt email of claim 1 further comprising the step of:
allowing users to use a familiar Email software interface to do
encryption software key management.
4. The method for integrating Public-key encryption software and Email software
10 in order to encrypt/decrypt email of claim 1 wherein said conversion of said
addresses of said recipients' email addresses from Email software format to
Internet format is required in order to obtain keys to proceed further.
5. The method for integrating Public-key encryption software and Email software
15 in order to encrypt/decrypt email of claim 1 wherein said public keys are obtained
from a encryption software server.
6. The method for integrating Public-key encryption software and Email software
in order to encrypt/decrypt email of claim 1 wherein said keys are used to encrypt
20 Email software email.
7. The method for integrating Public-key encryption software and Email software

in order to encrypt/decrypt email of claim 1 wherein said keys are used to encrypt
Email software attachments.

8. The method for integrating Public-key encryption software and Email software
5 in order to encrypt/decrypt email of claim 1 wherein said Internet addresses are
converted back to Email software format to allow email processing using said
email software.

9. The method for integrating Public-key encryption software and Email software
10 in order to encrypt/decrypt email of claim 1 wherein said conversion of said
Internet addresses back to Email software addresses allows the retention of rich
text content.

10. The method for integrating Public-key encryption software and Email
15 software in order to encrypt/decrypt email of claim 1 wherein a means is provided
for users to read said encryption software encrypted email.

11. The method for integrating Public-key encryption software and Email
software in order to encrypt/decrypt email of claim 1 wherein a means is provided
20 for users to read said encryption software encrypted attachments.

12. The method for integrating Public-key encryption software and Email

software in order to encrypt/decrypt email of claim 1 wherein said users are requested to type in a password of a encryption software private key.

13. The method for integrating Public-key encryption software and Email

5 software in order to encrypt/decrypt email of claim 1 wherein said encryption software password and private key are used to decrypt mail content.

14. The method for integrating Public-key encryption software and Email

10 software in order to encrypt/decrypt email of claim 1 wherein said encryption software password and private key are used to decrypt attachment files.

15. The method for integrating Public-key encryption software and Email

15 software in order to encrypt/decrypt email of claim 1 wherein said users can use a familiar Email software interface in order to handle encryption software key management.

16. The method for integrating Public-key encryption software and Email

20 software in order to encrypt/decrypt email of claim 1 wherein said encryption software key management includes changing said password of said encryption software private key.

17. The method for integrating Public-key encryption software and Email

software in order to encrypt/decrypt email of claim 1 wherein said encryption software key management also includes registering other encryption software public keys with said encryption software key server.

5 18. The method for integrating Public-key encryption software and Email software in order to encrypt/decrypt email of claim 1 wherein said encryption software key management also includes sending out said user's encryption software public key to other people.

10 19. A system for integrating Public-key encryption software and Email software in order to encrypt/decrypt email comprising:

 means for converting all recipients' addresses from said email software format to Internet format,

 means for obtaining keys from encryption software key server,

15 means for using all recipients' encryption software public keys to encrypt mail,

 means for using all recipients' encryption software public keys to encrypt attachments, and

20 means for converting all recipients' addresses from internet format to Email software format.

20. The system for integrating Public-key encryption software and Email software in order to encrypt/decrypt email of claim 19 further comprising:

means for providing a means for users to read encryption software
encrypted email software mail,

means for providing a means for users to read encryption software
encrypted email software attachments,

5 means for requesting users to type password of encryption
software private key decrypting mail content and decrypting attachment content.

21. The system for integrating Public-key encryption software and Email software
in order to encrypt/decrypt email of claim 19 further comprising the step of:

10 allowing users to use a familiar Email software interface to do
encryption software key management.

22. The system for integrating Public-key encryption software and Email software
in order to encrypt/decrypt email of claim 19 wherein said conversion of said

15 addresses of said recipients' email addresses from Email software format to
Internet format is required in order to obtain keys to proceed further.

23. The system for integrating Public-key encryption software and Email software
in order to encrypt/decrypt email of claim 19 wherein said public keys are

20 obtained from an encryption software server.

24. The system for integrating Public-key encryption software and Email software

in order to encrypt/decrypt email of claim 19 wherein said keys are used to encrypt Email software email.

25. The system for integrating Public-key encryption software and Email software

5 in order to encrypt/decrypt email of claim 19 wherein said keys are used to encrypt Email software attachments.

26. The system for integrating Public-key encryption software and Email software in order to encrypt/decrypt email of claim 19 wherein said Internet addresses are

10 converted back to Email software format to allow email processing using said email software.

27. The system for integrating Public-key encryption software and Email software in order to encrypt/decrypt email of claim 19 wherein said conversion of said

15 Internet addresses back to Email software addresses allows the retention of rich text content.

28. The system for integrating Public-key encryption software and Email software in order to encrypt/decrypt email of claim 19 wherein a means is provided for

20 users to read said encryption software encrypted email.

29. The system for integrating Public-key encryption software and Email software

in order to encrypt/decrypt email of claim 19 wherein a means is provided for users to read said encryption software encrypted attachments.

30. The system for integrating Public-key encryption software and Email software
5 in order to encrypt/decrypt email of claim 19 wherein said users are requested to type in a password of said encryption software private key.

31. The system for integrating Public-key encryption software and Email software
in order to encrypt/decrypt email of claim 19 wherein said encryption software
10 password and private key are used to decrypt mail content.

32. The system for integrating Public-key encryption software and Email software
in order to encrypt/decrypt email of claim 19 wherein said encryption software
password and private key are used to decrypt attachment files.

15

33. The system for integrating Public-key encryption software and Email software
in order to encrypt/decrypt email of claim 19 wherein said users can use a
familiar Email software interface in order to handle encryption software key
management.

20

34. The system for integrating Public-key encryption software and Email software

in order to encrypt/decrypt email of claim 19 wherein said encryption software key management includes changing said password of said encryption software private key.

5 35. The system for integrating Public-key encryption software and Email software in order to encrypt/decrypt email of claim 19 wherein said encryption software key management also includes registering other encryption software public keys with said encryption software key server.

10 36. The method for integrating Public-key encryption software and Email software in order to encrypt/decrypt email of claim 19 wherein said encryption software key management also includes sending out said user's encryption software public key to other people.

15 37. A program retention device containing program instruction code executable on at least one networked computing device for integrating Public-key encryption software and Email software in order to encrypt/decrypt email whereby said program performs the steps of:

 converting all recipients' addresses from email software format to

20 Internet format,

 obtaining keys from encryption software key server,

 using all recipients' encryption software public keys to encrypt mail,

using all recipients' encryption software public keys to encrypt
attachments and

converting all recipients' addresses from internet format to email
software format.

5

38. The program retention device containing program instruction code
executable on at least one networked computing device for integrating Public-key
encryption software and Email software in order to encrypt/decrypt email

program retention device containing program instruction code executable on at
10 least one networked computing device of claim 37 whereby said program further
performs the steps of:

providing a means for users to read encryption software encrypted
email software mail,

providing a means for users to read encryption software encrypted
15 email software attachments,

requesting users to type password of encryption software private
key,

decrypting mail content, and

decrypting attachment content.

20

39. The program retention device containing program instruction code
executable on at least one networked computing device for integrating Public-key
encryption software and Email software in order to encrypt/decrypt email of

claim 37 further comprising the step of:

allowing users to use a familiar Email software interface to do encryption software key management.

5 40. The program retention device containing program instruction code
executable on at least one networked computing device for integrating Public-key
encryption software and Email software in order to encrypt/decrypt of claim 37
wherein said conversion of said addresses of said recipients' email addresses
from Email software format to Internet format is required in order to obtain keys
10 to proceed further.

41. The program retention device containing program instruction code executable
on at least one networked computing device for integrating Public-key encryption
software and Email software in order to encrypt/decrypt email of claim 37
15 wherein said public keys are obtained from a encryption software server.

42. The program retention device containing program instruction code executable
on at least one networked computing device for integrating Public-key encryption
software and Email software in order to encrypt/decrypt email of claim 37
20 wherein said keys are used to encrypt Email software email.

43. The program retention device containing program instruction code executable

on at least one networked computing device for integrating Public-key encryption software and Email software in order to encrypt/decrypt email of claim 37 wherein said keys are used to encrypt Email software attachments.

5 44. The program retention device containing program instruction code executable on at least one networked computing device for integrating Public-key encryption software and Email software in order to encrypt/decrypt email of claim 37 wherein said Internet addresses are converted back to Email software format to allow email processing using said email software.

10

45. The program retention device containing program instruction code executable on at least one networked computing device for integrating Public-key encryption software and Email software in order to encrypt/decrypt email of claim 37 wherein said conversion of said Internet addresses back to Email software

15 addresses allows the retention of rich text content.

46. The program retention device containing program instruction code executable on at least one networked computing device for integrating Public-key encryption software and Email software in order to encrypt/decrypt email of
20 claim 37 wherein a means is provided for users to read said encryption software encrypted email.

47. The program retention device containing program instruction code

executable on at least one networked computing device for integrating Public-key encryption software and Email software in order to encrypt/decrypt email of claim 37 wherein a means is provided for users to read said encryption software encrypted attachments.

5

48. The program retention device containing program instruction code executable on at least one networked computing device for integrating Public-key encryption software and Email software in order to encrypt/decrypt email of claim 37 wherein said users are requested to type in a password of a encryption software private key.

10

49. The program retention device containing program instruction code executable on at least one networked computing device for integrating Public-key encryption software and Email software in order to encrypt/decrypt email of claim 37 wherein said encryption software password and private key are used to decrypt mail content.

15

50. The program retention device containing program instruction code executable on at least one networked computing device for integrating Public-key encryption software and Email software in order to encrypt/decrypt email of claim 37 wherein said encryption software password and private key are used to decrypt attachment files.

20

51. The program retention device containing program instruction code
executable on at least one networked computing device for integrating Public-key
encryption software and Email software in order to encrypt/decrypt email of
claim 37 wherein said users can use a familiar Email software interface in order
5 to handle encryption software key management.

52. The program retention device containing program instruction code
executable on at least one networked computing device for integrating Public-key
encryption software and Email software in order to encrypt/decrypt email of
10 claim 37 wherein said encryption software key management includes changing
said password of said encryption software private key.

53. The program retention device containing program instruction code
executable on at least one networked computing device for integrating Public-key
15 encryption software and Email software in order to encrypt/decrypt email of
claim 37 wherein said encryption software key management also includes
registering other encryption software public keys with said encryption software
key server.

20 54. The program retention device containing program instruction code
executable on at least one networked computing device for integrating Public-key
encryption software and Email software in order to encrypt/decrypt email of

TS01-513

claim 37 wherein said encryption software key management also includes
sending out said user's encryption software public key to other people.

5

10

15

20